## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kanakasabapathi Subramanian et al.

Title: THREE DIMENSIONAL HIGH ASPECT RATIO MICROMACHINING

Docket No.: 1153.071US1 Filed: June 27, 2003 Examiner: Unknown

Eustomer No.:21186

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450



Serial No.: 10/607,838

Due Date: N/A

Group Art Unit: 2811 Confirmation No.: 8463

We are transmitting herewith the following attached items (as indicated with an "X"):

 $\underline{X}$  A return postcard.

X An Information Disclosure Statement (2 pgs.), Form 1449 (1 pg.), and copies of 15 cited documents.

If not provided for in a separate paper filed herewith, Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers and please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. Customer Number 21186

Atty: Bradle A. Forrest Reg. No. 30,837

States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this Quaday of January, 2004.

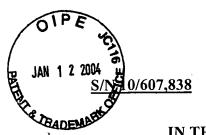
Sulin Milova

Juliu Aklova
Signature

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Customer Number 21186

(GENERAL)



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kanakasabapathi Subramanian et al.

Examiner: Unknown

Serial No.:

10/607,838

Group Art Unit:

Unknown 2811

Filed:

June 27, 2003

Docket:

1153.071US1

Title:

THREE DIMENSIONAL HIGH ASPECT RATIO MICROMACHINING

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Information Disclosure Statement considered.

Page 2

Dkt: 1153.071US1

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

KANAKASABAPATHI SUBRAMANIAN ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. Box 2938 Minneapolis, MN 55402 (612) 373-6972

Date 1-9-2004

Bradley A Forrest

Reg. No. 30,837

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this **26** day of January, 2004.

Signature abilova

PTO/SB/08A(10-01)
Approved for use through 10/31/2002. OMB 651-0031
US Patent & Tradement Office: U.S. DEPARTMENT OF COMMERCE
work Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. JAN 9 2 2004 Substitute from 1440.
INFORMATION DISCLUSUS EMENT BY APPLICANT Use as many sheets as necessary) Complete if Known **Application Number** 10/607,838 June 27, 2003 **Filing Date** Subramanian, Kanakasabapathi First Nam d Inventor **Group Art Unit** 2811 Unknown **Examiner Name** Attorney Docket No: 1153.071US1 Sheet 1 of 1

US PATENT DOCUMENTS								
Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate		
	US-5,198,390	03/30/1993	MacDoanld, Noel C., et al.	437	203	01/16/1992		
	US-5,536,988	07/16/1996	Zhang, Z. Lisa, et al.	310	309	06/01/1993		
	US-5,628,917	05/13/1997	MacDonald, Noel C., et al.	216	2	02/03/1995		
	US-5,770,465	06/23/1998	MacDonald, Noel C., et al.	437	67	06/21/1996		
	US-6,000,280	12/14/1999	Miller, Scott A., et al.	73	105	03/23/1998		
	US-6,073,484	06/13/2000	Miller, Scott A., et al.	73	105	07/19/1996		

FOREIGN PATENT DOCUMENTS									
Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T <sup>2</sup>			

	OTI	HER DOCUMENTS NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
		ALBRECHT, T. R., et al., "Microfabrication of integrated scanning tunneling		
		microscope", Journal of Vacuum Science & Technology A (Vacuum, Surfaces, and		
		Films), 8(1), (January-February 1990), 317-318		
		HOFMANN, W., et al., "Monolithic three-dimensional single-crystal silicon microelectromechanical systems", Sensors and Materials, 10(6), (1998), 337-350		
		MILLER, S. A., "Microelectromechanical scanning probe instruments for array		
		architectures", Review of Scientific Instruments, 68(11), (November 1997), 4155-62		
		SHAW, K. A., et al., "SCREAM I: a single mask, single-crystal silicon, reactive ion		
		etching process for microelectromechanical structures", Sensors and Actuators A		
		(Physical), A40 (1), (1994), 63-70		
		TIROLE, N., et al., "3D silicon electrostatic microactuator", Journal of		
		Micromechanics and Microengineering, 3(3), (September 1993), 155-157		
		TIROLE, N., et al., "Three-dimensional silicon electrostatic linear microactuator", Sensors and Actuators A (Physical), A48 (2), (May 1995), 145-150		
		WEBB, R. Y., et al., "Suspended thermal oxide trench isolation for SCS MEMS", Proceedings of the SPIE - The International Society for Optical Engineering, 3519, (1998), 196-199		
		XU, Y., et al., "Integrated micro-scanning tunneling microscope", <u>Applied Physics</u> Letters, 67(16), (October 1995), 2305-2307		
,		ZHANG, Z. L., et al., "A RIE process for submicron, silicon electromechanical structures", <u>Journal of Micromechanics and Microengineering</u> , 2 (1), (March 1992), 31-38		

**EXAMINER** 

**DATE CONSIDERED**